

AMENDMENTS TO THE CLAIMS

1. (Original) A method for sending a message via a high-performance message queue, comprising:
 - providing a message queue associated with a context;
 - executing a user interface thread associated with said context;
 - receiving a request from said user interface thread to send a message to a second user interface thread;
 - determining whether said second user interface thread is associated with said context; and
 - in response to determining that said second user interface thread is associated with said context, sending said message from said user interface thread directly to said second user interface thread, thereby bypassing said message queue.
2. (Original) The method of Claim 1, further comprising:
 - in response to determining that said second user interface thread is not associated with said context, atomically adding said message to a queue associated with a second context.
3. (Original) The method of Claim 2, further comprising:
 - atomically providing an indication to said second context that a message has been added to said queue associated with said second context.
4. (Original) The method of Claim 3, further comprising:
 - waiting for an indication that said message added to said queue associated with said second context has been processed; and
 - processing additional messages while waiting for said indication.
5. (Original) The method of Claim 4, wherein atomically adding said message to a queue associated with a second context comprises locking said message and atomically adding said message to a singly-linked list associated with said context.
- 6-7. (Canceled)
8. (Original) A method for posting a message via a high-performance message queue, comprising:
 - providing a message queue associated with a context;
 - executing a user interface thread associated with said context;

receiving a request from said user interface thread to post a message to a queue associated with a second context;

atomically adding said message to said queue associated with said second context; and

atomically providing an indication to said second context that a message has been posted to said queue associated with said second context.

9. (Original) The method of Claim 8, further comprising:

validating parameters associated with said message;

determining a processing function to handle the dequeuing of said message; and

completing a message entry for said message including said validated parameters and the identity of said processing function.

10. (Original) The method of Claim 9, wherein atomically adding said message to said queue associated with said second context comprises locking said message entry and atomically adding said message entry to a singly-linked list associated with said context.

11-22. (Canceled)

23. (New) A computer apparatus for sending a message via a high-performance message queue, comprising:

(a) a memory; and

(b) a processor connected to the memory, wherein the processor is configured to operate in accordance with executable instructions that, when executed, cause the processor to:

i. provide a message queue associated with a context;

ii. execute a user interface thread associated with said context;

iii. receive a request from said user interface thread to send a message to a second user interface thread;

iv. determine whether said second user interface thread is associated with said context; and

v. in response to determining that said second user interface thread is associated with said context, send said message from said user interface thread directly to said second user interface thread, thereby bypassing said message queue.

24. (New) The computer apparatus of Claim 23, wherein the processor is configured to operate in accordance with executable instructions that, when executed, further cause the processor to:

in response to determining that said second user interface thread is not associated with said context, atomically add said message to a queue associated with a second context.

25. (New) The computer apparatus of Claim 24, wherein the processor is configured to operate in accordance with executable instructions that, when executed, further cause the processor to:

atomically provide an indication to said second context that a message has been added to said queue associated with said second context.

26. (New) The computer apparatus of Claim 25, wherein the processor is configured to operate in accordance with executable instructions that, when executed, further cause the processor to:

wait for an indication that said message added to said queue associated with said second context has been processed; and

process additional messages while waiting for said indication.

27. (New) The computer apparatus of Claim 26, wherein to atomically add said message to a queue associated with a second context further comprises locking said message and atomically adding said message to a singly-linked list associated with said context.

28. (New) A computer-readable medium for performing a method for sending a message via a high-performance message queue, the method comprising:

providing a message queue associated with a context;

executing a user interface thread associated with said context;

receiving a request from said user interface thread to send a message to a second user interface thread;

determining whether said second user interface thread is associated with said context; and

in response to determining that said second user interface thread is associated with said context, sending said message from said user interface thread directly to said second user interface thread, thereby bypassing said message queue.

29. (New) The computer-readable medium of Claim 28, further comprising:

in response to determining that said second user interface thread is not associated with said context, atomically adding said message to a queue associated with a second context.

30. (New) The computer-readable medium of Claim 29, further comprising:
atomically providing an indication to said second context that a message has been added to said queue associated with said second context.

31. (New) The computer-readable medium of Claim 30, further comprising:
waiting for an indication that said message added to said queue associated with said second context has been processed; and
processing additional messages while waiting for said indication.

32. (New) The computer-readable medium of Claim 31, wherein atomically adding said message to a queue associated with a second context comprises locking said message and atomically adding said message to a singly-linked list associated with said context.

33. (New) A computer apparatus for posting a message via a high-performance message queue comprising:

- (a) a memory; and
- (b) a processor connected to the memory, wherein the processor is configured to operate in accordance with executable instructions that, when executed, cause the processor to:
 - i. provide a message queue associated with a context;
 - ii. execute a user interface thread associated with said context;
 - iii. receive a request from said user interface thread to post a message to a queue associated with a second context;
 - iv. atomically add said message to said queue associated with said second context; and
 - v. atomically provide an indication to said second context that a message has been posted to said queue associated with said second context.

34. (New) The computer apparatus of Claim 33, wherein the processor is configured to operate in accordance with executable instructions that, when executed, further cause the processor to:

- validate parameters associated with said message;
- determine a processing function to handle the dequeuing of said message; and

complete a message entry for said message including said validated parameters and the identity of said processing function.

35. (New) The computer apparatus of Claim 34, wherein to atomically add said message to said queue associated with said second context comprises locking said message entry and atomically adding said message entry to a singly-linked list associated with said context.

36. (New) A computer-readable medium for performing a method for posting a message via a high-performance message queue, the method comprising:

- providing a message queue associated with a context;
- executing a user interface thread associated with said context;
- receiving a request from said user interface thread to post a message to a queue associated with a second context;
- atomically adding said message to said queue associated with said second context; and
- atomically providing an indication to said second context that a message has been posted to said queue associated with said second context.

37. (New) The computer-readable medium of Claim 36, further comprising:

- validating parameters associated with said message;
- determining a processing function to handle the dequeuing of said message; and
- completing a message entry for said message including said validated parameters and the identity of said processing function.

38. (New) The computer-readable medium of Claim 37, wherein atomically adding said message to said queue associated with said second context comprises locking said message entry and atomically adding said message entry to a singly-linked list associated with said context.